

Thomas Oil Company

• 4311 MEADOW VIEW PLACE • ENCINO, CALIF. 91436

• 213-981-5979

• 805-872-0613

DIVISION

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OCT 6 1983

Request withdrawn  
by C006

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12/6/85

October 4, 1983

Mr. Dave Mitchell  
Department of Conservation  
Division of Oil and Gas  
4800 Stockdale Hwy  
Suite 417  
Bakersfield, CA 93309

Re: application for  
exemption of Olcese  
zone in Sec 26 T27S  
R28E MDBM Gardner  
Lease  
MT. Poso Field  
Kern Co.

Dear Mr. Mitchell:

I have reviewed the Environment Protection Agency "Criteria to exempt Aquifers" and have investigated the available data relative to the above captioned disposal site.

The Olcese zone does not produce water which serves as a drinking water source within a five mile radius of the above captioned lease. A detailed search of the records of the Kern Water Agency reveals no records of domestic water wells completed in the Olcese within the entire township. A search of the local area by land revealed a total of 4 domestic water wells within a five mile radius of the site. All 4 of the wells located were completed along stream beds at shallow depths and presumed to produce water from the stream course rather than the Olcese.

Typical Analysis of the water to be injected is:

B.C. Labs, lab No.	5982	5983	5984	5985
Well No.	Dorsey Inj. well	Dorsey #2	Dorsey #4 3	Dorsey #4
Boron	1.2 PPM	0.82 PPM	0.90 PPM	1.1 PPM
Chloride	254 PPM	148 PPM	98.2 PPM	223 PPM
Electrical Conductivity Micromohis X 106	1590	1340	1530	1330

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U.S. GEOLOGICAL SURVEY

Typical analysis of the water known to be produced from the Olcese: in Sec 28 of T29S R28E MDB&M, approximately 1.5 miles due west of the injection site is represented by the last three boiling test run on the well, tribe A6, in February 1975.

B.C. Labs, Lab No.	1172	1173	1209
Boron	2.51	2.49	3.52
Chloride	216.3	250.3	266.62
E.C. in Micromohis X 10-6	1750	1830	1900

(see enclosures)

It can readily be seen that the water produced by the Dorsey and Gardner Leases is of better quality than the water found in the Olcese Formation. It is obvious that continued disposal of the Dorsey and Gardner water into the Olcese Formation should improve rather than degrade the quality of the water in that formation. There is no record of analysis being run on residual oils and greases in the Olcese Formation water. A study of drillers logs relating to wells complete in Sec. 26 show references to "carbonaceous material", found in the Olcese Formation, although such references are not conclusive proof hydrocarbons being present, they may well be indicative of the presence of such hydrocarbons. Work is currently being done by Frank Mondary which has revealed several verifiable oil shows in the Olcese zone in the Mount Poso field. That work will be in your possession within two to three weeks, and the results of that work will be submitted as a supplement to this application.

The Dorsey area is more than ten miles from the nearest town, situated in rolling hills which are currently used for cattle grazing. The produced waters are currently used for cattle watering prior to disposal by injection into surface outcrops of the Olcese. The disposal into the Olcese was begun in the fall of 1978 and has continued to present at the rate of approximately 4000 barrels per day. Percolation of waste water into the Olcese outcrops in the stream bed has occurred. Produced water from "Dorsey Area" production has been percolating into Olcese outcrops in the stream bed since 1928.

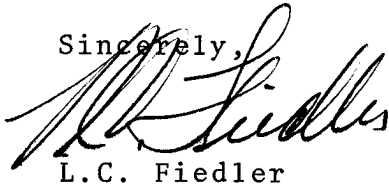
The data presented indicates that the Olcese Formation water is of lower quality than the produced water, and that the Olcese zone has been receiving produced waters since 1928 which would produce substantial hydrocarbon contamination of the Olcese zone even if the zone did not contain hydrocarbons.

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October 4, 1983

We therefore apply for exemption of the Olcese Zone in the area known as the "Dorsey Area" for the disposal of waste water produced in that area as represented by the enclosed analysis.

If you have any questions, please call.

Sincerely,

A handwritten signature in cursive script, appearing to read "L.C. Fiedler".

L.C. Fiedler

LC F/bg  
encl

# Memorandum

To : Bob Reid  
Sacramento

Date : February 29, 1984

MAR 5 2 01 PM '84

Subject: UIC Injection Zone  
Exemption  
Mount Poso Field  
Olcese Zone

From : Department of Conservation—  
Division of Oil and Gas

Place: Bakersfield

The subject zone exemption request, submitted by Macpherson Oil Company, is enclosed. Macpherson has injected produced waste water into the Olcese zone since December 1974 in the West area in well "Ring 20" 3 and since August 1975 in the southern tip of the Main area in well "Tribe A" 10. Offsetting "Tribe A" 10, John L. Sowers has injected since November 1978 in the Baker-Grover area in well "Tribe B" 65WD-28. The waste water, produced from the Vedder zone, generally tests between 1500-2500 ppm total dissolved solids and has the potential for beneficial use. In fact, surface discharge of produced waste water was allowed for several years for use as range water.

The request for zone exemption is based upon two points:

1. Formation water in the Olcese zone is unsuitable for use.
2. The Olcese zone is hydrocarbon bearing.

Based upon these points, we do not feel an exemption should be granted for the following reasons:

1. The Olcese zone water is of relatively good quality, testing 900-1100 ppm total dissolved solids. The water analyses taken from "Tribe A" 6, which is located approximately 1/4 mile directly updip from the injection well, "Tribe A" 10, tested oil and grease, as shown in the enclosure. The UIC, however, makes a clear distinction that water of a quality better than 3000 ppm total dissolved solids must be protected from degradation unless it can be proven that it is so contaminated that it would be economically or technologically impractical to render it fit for human consumption. There is no reference in the UIC to Class 2 or 3 waters.
2. The Division has no evidence, or reason to believe, that the Olcese zone has the potential for commercial hydrocarbon production. The core analysis enclosed is from a well located at least 2-1/2 miles away, and no attempt has been made to produce from the Olcese at this, or any other, location in Mount Poso field.

*Hal Bopp*

Hal Bopp  
Senior Oil and Gas Engineer

HB:mm

Enclosure

*Approved by  
FPA 200  
12/6/84*

APPLICATION FOR INJECTION ZONE EXEMPTION  
NON-HYDROCARBON PRODUCING ZONE - DISTRICT 4

1. Field Mount Poso
2. Area Baker-Grover, West, and southern portion of Main
3. Zone Olcese
4. Depth to Top of Zone 230'-920' (drill depth)/Elevation 0'-600'
5. Thickness 200'-350'
6. Areal Extent continuous throughout areas of injection, Baker-Grover and Main areas probably separated by fault
7. TDS of Zone 900-1100
8. TDS of Injection Fluid 1500-2500
9. Are Injected Fluids Other Than Produced Water No
10. Date Injection Began December 1974
11. Miscellaneous Information surface disposal of produced fluid formerly allowed
12. Drinking Water Aquifer Declaration is NOT a source
13. Distance to Towns 8 miles north-northeast of Oildale
14. Land Ownership West area - Bureau of Land Management, Baker-Grover & Main - private ownership. Land use - rangeland
15. Alternate Water Source possibly shallow water wells
16. Unusual Geology Vedder zone production is separated by faults between areas
17. Yield of Water Unknown

# MACPHERSON

O I L C O M P A N Y

4640 ADMIRALTY WAY, SUITE 525  
MARINA DEL REY, CALIFORNIA 90291  
213 823 7995

DIV. OF OIL & GAS  
MAR 5 2 43 PM '84

P.O. BOX 5368  
BAKERSFIELD, CALIFORNIA 93388  
805 393 3204

February 15, 1984

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FEB 18 1984

DIVISION OF OIL & GAS

Al Hluza, Deputy Supervisor  
Department of Conservation  
Division of Oil & Gas  
4800 Stockdale Hwy., Suite 417  
Bakersfield, Ca 93309

Re: Olcese Injection  
Mt. Poso Field

Gentlemen:

On April 4, 1983, the Division of Oil & Gas served notice on Macpherson Oil Company to cease injection into the Olcese zone in the Mt. Poso field effective September 14, 1984. (Enclosure 1) In your notice you described that new regulations have been imposed on water injection into certain zones for the protection of "Class 2 drinking water".

Macpherson Oil Company currently has 3 water injection wells in the Olcese zone in the Mt. Poso and West Mt. Poso field. (Enclosure 2). The economic impact of this notice on Macpherson Oil Company leases is severe enough to render the lease uneconomic to produce if we comply. The estimated additional cost of disposing of water from our presently producing wells by alternative means complying with existing requirements will exceed \$500,000 this year.


We decided to conduct a study of the water integrity of the Olcese sands zone in the Mt. Poso field. We employed an independent petroleum geologist, Frank Mondary, to sample water from the Olcese zone from Macpherson Oil Company well Tribe A-6 Sec. 28 T27S R28E. (Enclosure 3). Mr. Mondary also conducted a brief study of other wells owned by other companies in the Mt. Poso field which may have taken core samples of the Olcese sand zone.

The results of the samples from well Tribe A-6 indicated that the water integrity in the Olcese sand qualified the water as Class 3 (unsafe for human consumption or agricultural use),

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OIL FIELD

rather than Class 2. Secondly, core samples found in Shell Oil Company's well Vedder 12-15 Sec. 9 T27S R28E indicated that the Olcese sand zone is oil bearing and contains water unsuitable for human or agricultural use, thus, the implimentation of the new restriction will serve no useful purpose, will not protect drinking water, public health, or any other ligitimate interest, will cost us more than \$500,000 for nothing, will effectively eliminate several hundred barrels per year of worthwhile production for no good reason. Therefore, we hereby appeal your decision requiring Macpherson Oil Company to cease injection into the Olcese sand zone in the Mt. Poso field, and we hereby request the exemption of the Olcese sand zone aquifer from the new regulations referred to in your letter of April 4, 1983.

Very truly yours,



Donald R. Macpherson, Jr.  
Vice President  
Macpherson Oil Company

DRM:ck

Enclosures